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ORIGINAL COMMUNICATIONS.

SOME PRACTICAL OBSERVATIONS ON THE DIFFERENTIAL DIAG- NOSIS AND TREATMENT OF CROUP AND DIPHTHERIA.

BY WILLIAM S. STEWART, M.D.

*Read before the Philadelphia County Medical Society,
March 8, 1876.*

GENTLEMEN:—In the early part of this season of interesting and instructive meetings of our Society, I had the honor of being present to hear our learned brother read a paper on the subject, "Are Croup and Diphtheria Identical?" which you will find published in No. 213, vol. vi., of the *Medical Times*. It is well worth its place in all our libraries.

After listening to the discussion which followed, the incredulity expressed, and the effects produced upon the minds of others, perhaps, as well as on myself, I thought the subject, in relation to the general practitioner, too important to admit of any doubts, and that it deserves to be discussed and re-discussed until we are assured of the true nature of both diseases, as we come in contact with them more or less every day.

I will not presume to review the ground gone over by my colleague in regard to the anatomical situations, the microscopic and chemical conditions, of the membranes formed; but rather trust in the evidence which we have when ushered into the chamber where all are anxiously intent on the announcement of the physician as to the nature of the disease that has already made an inroad in their happy home, and which, according to statistics, carries away so many of our dear ones.

In the discussion of this subject to which I have referred, the following language was used: "Probably only one out of twenty cases met with and considered as croup would really be that affection. A physician would see twenty cases of diphtheria before he would see one case of true pseudo-membranous laryngitis." If that is true, I fear there are many errors in the diagnosis of that disease.

I am disposed to think that there are as many cases of genuine croup to-day as there ever were. I am sure, however, that

we are not called upon to treat all the cases that do occur, since almost every mother is able to recognize it in its inception, and, being apprehensive of its invasion, is always prepared to combat it with suitable remedies.

Another evidence of this fact is, when sent for to see a case, instead of being requested to see a certain one who is sick, the messenger says, Come quickly, for Johnny, or Mary, or whoever it may be, has the croup, which implies not only that they are familiar with the disease, but have probably exhausted all the various domestic remedies for its arrest.

It is not a rare occurrence to be called in to see some individual in a family where, the night previous, perhaps, some other member of the same family has had an attack of croup and was treated successfully without any physician.

I think it very probable that the majority of cases of croup are so treated.

This can only be accounted for from the fact of the frequent occurrence of the disease, and the unseasonable hour to call in a physician, and the necessity for prompt measures being at once adopted.

I wish, before entering upon the discussion, to refer to another remark made in regard to diphtheria. That is, "I think there is more diphtheria in the minds of the physicians than in the throats of the patients."

I hope that remark is not applicable to any of the members of the regular profession, as it certainly reflects either incapacity or deception, neither of which ought to be tolerated among the conscientious and scientific, but both of which are almost necessary to the irregular and the quack.

It is practical knowledge that is needed, with a great deal of uncommon good sense, in order to arrive at distinction in any profession or calling; and especially is it the case in our profession, when we are regarded as the oracle whose decisions and directions are immutable, and the superiority of our remedies appearing of too high an order to descend even to our own familiar language. It seems to be a necessity that we resurrect the dead in order that we may minister to the living.

There seems to be a heavy cloud of mysticism which ought not to hang over the medical profession of to-day. I think the time has come when the intelligence

of the community is sufficient to understand the what, the why, and the wherefore of our actions, and, consequently, could better appreciate the earnest efforts of the physician, and would not be so easily led astray by every new device that is placarded so as to allure the unsophisticated by its enticements. It is too true that in the allied profession there is much deception practised on the part of the doctor with his patients and friends, sometimes through ignorance and at other times by design, and from both causes, perhaps, are unwilling to give a disease its right name, but must magnify it so as to make the success of the treatment so astonishingly evident that its effects on the victim and his friends would be perfectly enchanting. Did you ever see such devotion as is exhibited by the converts to homœopathy? Is it not because "it is the God which they so ignorantly worship"?

In order, therefore, that the truth may be known, we must not only be educated ourselves, but we must be educators of those with whom we may be associated.

Before comparing these two diseases, I will first endeavor to define them separately.

Croup is inflammation of the trachea, which may extend up into the larynx or down into the bronchi. It occurs in young children after they are weaned, and is said to have a greater affinity for the male sex. The chief characteristic of croup is the formation of a membrane which lines the windpipe, the larynx, and bronchi as far as it extends. The gravity of the disease depends upon the obstruction produced by the membrane in respiration. The symptoms are generally ushered in after sunset or midnight; and it is presumable that the disease is produced by a sudden chilling of the secretions of the body.

The first indications of the disease are symptoms of catarrh, with sneezing, coughing, and hoarseness. It is the last symptom which is the signal for attention.

The cough is of a loud, ringing character, resembling somewhat the sound of a frog or the bark of a dog, and is so evident that one who has never heard it could not fail to recognize the symptom; this continues until the breathing becomes difficult and stridulous. If the disease were not promptly arrested, it would soon

prove fatal to its victim. Other symptoms which accompany the disease are high inflammatory fever, flushed face, hot skin, thirst, frequent and hard pulse.

There is no morbid appearance in the pharynx nor difficulty in swallowing.

I will not stop here to describe true and false croup as distinct diseases, as both depend upon the same causes and have like symptoms. Suffice it to say that there are modifications in all diseases according to the constitutions which they attack, and the real difference is in degree rather than kind.

As to the symptoms of diphtheria.

The disease is ushered in with a chill, more or less fever, no cough, enlargement of the glands of the neck and throat; the patient complains of sore throat, difficulty in deglutition, pains and aching all through the system, indisposition from prostration. On examining the throat, we find white patches of membranous exudation deposited on the tonsils, it may be a swollen flabulous uvula, the whole cavity of the upper jaw generally dotted over with fine drops of clear exudation. Sometimes we find a long membranous band extending down from the posterior nares, which is soft but very tenacious. As the disease progresses, the whole of the throat becomes involved. Not only does the uvula become covered, the roof of the mouth, the tonsils, the back part of the pharynx, but the disease extends up through the posterior nares until the whole passage-way of the nose is almost if not altogether closed.

The putridity of this membrane when left undisturbed is very offensive, and has a characteristic odor which, to a person of an acute organ of smell, can be recognized in entering the chamber.

I think it is, in my experience, as easily detected on first visit as the odor of a well-developed case of variola.

I wish particularly to call your attention to the fine drops of exudation, perhaps the size of a pin's head, which are frequently found dotting the upper and posterior part of the mouth, resembling somewhat drops of perspiration.

This is, to me, a certain indication of diphtheria. I have seen cases, where that condition was left undisturbed, and the deposit kept developing until the drops coalesced and united into one coagulated band that extended over the entire roof of the mouth with such evenness that it would

evade your closest scrutiny were your attention not especially directed to it or you apprehensive of such a condition.

In contrasting the two diseases we find the following dissimilarity:

Croup is ushered in by a cough.

Diphtheria by a chill.

Croup is most frequent when there is greater humidity in the atmosphere and the east wind is prevailing.

Diphtheria does not depend upon meteorological changes.

Croup is not contagious.

Diphtheria is most decidedly is.

Croup comes on suddenly.

Diphtheria may be tardy.

Croup is recognized by the croaking sound.

Diphtheria is known by the patches of membrane on the throat.

Croup must be promptly relieved.

Diphtheria is tardy in its resolution.

Croup does not affect the system.

Diphtheria is very prostrating.

Croup occurs most frequently in childhood and from two to five years.

Diphtheria occurs at all ages.

Croup is apt to occur very often in the same case.

Diphtheria may occur more than once in the same case, but the patient is not so liable to a second attack.

I might add also the contrast in the chemical condition of the urine and the blood, but, as that was referred to in Dr. Welch's paper, I will simply mention that the urine is not affected in croup, but in diphtheria it becomes albuminous. So also in the blood there may be an increase of a normal constituent, fibrine, in croup, but in diphtheria there is a morbid condition of the blood not determined by increase of a normal constituent, and produced only by a poison in the system. In consequence of the above conditions there are no offensive exhalations arising from croup, which are very manifest in diphtheria.

It is seldom that both diseases occur in one person at the same time. In the month of October, 1875, I was sent for to see Rebecca M., aged five years, who had been a subject of frequent attacks of croup, and who had not then entirely recovered from an attack, but was suddenly taken with new symptoms,—chilly sensations, sore throat, prostration, etc. On examination I found very manifest evidence of diphtheria. I immediately mopped off her

throat with the liquid persulphate of iron diluted, cleaning the membrane, which had already formed on her tonsils, entirely away. I returned again in the evening. The membrane had not reformed. She appeared to be much better, and consequently I did not apprehend any further difficulty. But the next morning I was summoned to see her again. I found her gasping for breath. I at once examined her throat, but could find no membrane. I soon discovered that her croup had reappeared, and to an alarming extent. I administered promptly remedies for her relief, but with no avail. It became evident that if she was not soon relieved she would die, as her breathing was very difficult and laborious, and her body was turning dark from the blood not being properly oxygenized. I at once sent for my friend Dr. Drysdale, who responded promptly, and, after consulting together, resolved that nothing further could be done except tracheotomy, which, when done, gave instantaneous relief, and a perfect recovery without an untoward symptom.

I mention this case as one of interest to the profession, which leads us to the conclusion that neither disease is sufficient in its alliance to the other to prevent an attack of both at the same time.

As to the treatment of croup.

I will mention those remedies which are most frequently used, and which generally prove successful, with a view to show the contrast of these two diseases throughout, rather than to hope to benefit you by any new suggestions. The first effect which we most desire is free emesis, which, if taken in time, gives instantaneous relief.

Among the various remedies, first and mildest is ipecacuanha, either alone in powder or syrup, or combined with tartarized antimony. Mustard is very efficacious, the pulverized sinapis of the Pharmacopœia, in teaspoonful doses given in water. The various nauseating oils are resorted to, often with good effect. Last, and perhaps best of all, is powdered alum and syrup, equal quantities of each, given for effect, it may be in teaspoonful doses every five minutes, until free vomiting of the membrane is produced.

When the emetics do not prove satisfactory, cathartics and absorbents are resorted to. Calomel and soda are very beneficial combined together in small doses and frequently repeated. Local applications

in croup are very efficacious. Perhaps after the first emetic the child should be put in a warm bath of about 96°, containing salt and mustard, and, after remaining about ten minutes, taken out, wiped dry, and wrapped up in warm blankets.

The counter-irritating action of mustard, if taken early in an attack, acts almost like a charm in its prophylactic effect.

Spiritus terebinthinæ is also well worth resorting to, both as an irritant and solvent in the rapidity with which it is absorbed into the system. Blisters are not necessary nor considered efficacious, as being too slow in their effects. After all the prompt appliances have produced as much irritation as is tolerable, an after-application of an unctuous nature, such as lard and snuff combined, should be worn over the breast for some time, as the disease frequently manifests a disposition to return about the same time, for three or more successive days.

The patient must be carefully guarded against any change of temperature or vicissitude that might provoke a return of the disease.

After the choking paroxysm of the disease has passed away, the patient should take an expectorant to allay the remaining irritation and cough. Perhaps as good a combination as might be suggested for this purpose would be a mixture containing equal parts of syrup of senega, squills, ipecacuanha, acacia, and paregoric. In a few days all the symptoms will disappear and the patient will be well and hearty.

As to the treatment of diphtheria.

I will not stop to enumerate the long list of remedies used, but will confine myself to the method which I have adopted, and with such evident success that I feel glad to announce to any of you who have not followed the same line of treatment that you will be compelled to say, "Eureka." I am sure I feel quite as enthusiastic in the success of the treatment which I propose to lay down, as one of our number is in the treatment of variola with milk-punch and egg-nog.

If you are permitted to see the patient within the first few hours of the attack, commence your treatment at once with quinine and aromatic sulphuric acid, in doses suitable to the age of the person receiving it. Give freely of solution of chlorate of potassa, as a disinfectant, and perhaps you will not be required to ad-

minister any other remedies. If, however, the membrane has become so thickly deposited as not to be affected by the acid and chlorine, you should apply with your own hand a mop (properly made) saturated with the liquid persulphate of iron, and literally swab out the throat until you remove every particle of membrane. Let this be repeated two or more times each day, or as often as the membrane would continue so to be reproduced, and you will have the satisfaction of seeing your patient make a speedy recovery without any of the consequent sequelæ.

I took my first hint of the sulphuric acid treatment from a short extract which I clipped from a paper coming from a doctor in Australia, where the disease was producing such extensive ravages that the government offered a large reward for any certain method of cure. I will quote from the paper:

"It is simply the use of sulphuric acid, of which four drops are diluted in three-fourths of a tumbler of water to be administered to a grown person, and a smaller dose to children, at intervals not specified. The result is said to be a coagulation of the diphtheritic membrane and its ready removing by coughing. It is asserted, where the case thus treated has not advanced to a nearly fatal termination, the patient recovered in almost every instance."

This suggested to me the treatment which I have already announced; and from the experience of entire success which I have had in the last two years in not having one fatal case during that time from that disease, where I had the treating of the case from the beginning, I do not hesitate in declaring it as my opinion that quinine as an eliminator of the poison from the system, and sulphuric acid as a detergent to the throat, are decidedly as much a specific for diphtheria as quinine is for intermittent fever, or iodide of potash and bichloride of mercury are for tertiary syphilis.

Without delaying you any longer, let us contrast the treatment of these diseases.

In croup we must adopt prompt measures in the beginning of the disease.

In diphtheria it is not always evident in the first symptoms what the disease will be.

In croup emetics are indicated.

In diphtheria emetics are too prostrating. In croup counter-irritants are very essential.

In diphtheria counter-irritants are of no avail.

In croup no topical applications are made to the membrane.

In diphtheria mopping off the membrane is a necessity.

In croup expectorants are required.

In diphtheria they are not needed.

In croup depressants are given.

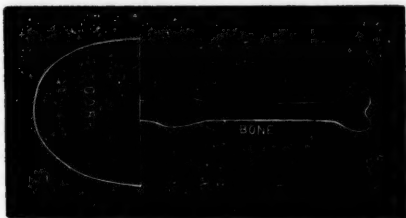
In diphtheria stimulants are required.

And so we might go on, pointing out the separate and diverging routes of both diseases, until we reach the limit of our ability, the fiat, "Thus far shalt thou go, and no farther."

A NEW INTRA-UTERINE PESSARY.

BY E. S. LANSING, M.D.

I OFFER to the profession a new intra-uterine stem. In this instrument the objection to all others I have used, of fretting the lining membrane of the uterus, is obviated. Also the liability to drop out or be forced out of the uterus is fully met and overcome, as experience has proved.



The stem is of bone, smoothly worked (I took the handle of an old tooth-brush), the uterine end shaped like the cavity of the uterus, triangular. The bulb is of cork, hemispherical in shape, and attached to the stem by a wire passing through it and into the stem. The cork or bulb is covered with *rubber*, making it impervious to the secretions of the vagina. To accomplish this, I used the rubber cement used by shoemakers in cobbling. The shape of the uterine end prevents injury to the mucous membrane, and assists in retaining it in situ. The circular muscular contraction of the vagina, acting upon the hemispherical bulb, forces it up against the neck of the uterus. By using a small sea-tangle tent before inserting the stem, it is readily introduced. In extracting it, the uterus should be supported by the finger.

I have used this in a case that gave me great annoyance, and in which all other

appliances and treatment had failed, and it proved a success. My patient was able to attend to light duties incident to house-keeping, with no inconvenience to her during its use, which I attribute to its being retained exactly in place.

Exact measurement should be made in each case, and the stem made to fit.

BURLINGTON, N. J.

NOTES OF HOSPITAL PRACTICE.

JEFFERSON MEDICAL COLLEGE.

SURGICAL CLINIC OF PROF. GROSS, SEPTEMBER 27, 1876.

Reported by WILLIAM A. JOHNSTON, M.D.

DISLOCATION OF THE HIP-JOINT IN A CHILD SIX MONTHS OF AGE.

GENTLEMEN,—Upwards of six years ago, this child, M. S., æt. 7 years, from Oil City, Pa., had a fall, the exact history of which I am unable to obtain. Since that time the left hip-joint has presented the deformity which you observe as the little patient lies before you. You notice that the nates of the injured side is flattened, and much broader than the opposite one. You also notice that the great trochanter is very prominent, and in much closer proximity to the anterior superior spine of the ilium than naturally. The gluteo-femoral crease is much higher than common.

A line drawn from the anterior superior spinous process of the ilium to the tuberosity of the ischium, in the natural state, leaves the great trochanter below that line. The contrary of this is true here. This method of measurement, first suggested by Nélaton, is a valuable one. Again, you observe that the limb is rigid, and that there is a strong tendency to inversion of the knee and foot, and by measurement the injured limb is found to be one and three-quarter inches shorter than its fellow. Now, what is the diagnosis? The symptoms point unmistakably to dislocation of the head of the femur upon the dorsum of the ilium. To recapitulate, what are these symptoms? The unusual prominence of the great trochanter, and its close proximity to the anterior superior spine of the ilium, the peculiar deformity, the unusual fulness of the upper part of the thigh, the higher plane of the gluteo-femoral crease, the shortening of the affected limb, and the inversion of the knee and foot.

In fracture there is shortening, but it is effaced by extension and counter-extension; and in fracture of the neck of the femur within the capsular ligament, as seen in old persons, there is eversion instead of inversion, and the trochanter is drawn posteriorly and is less salient. The health of this patient is good, and there is no history of a scrofulous taint; hence the case is not one of coxalgia.

There are several varieties of dislocation of this joint, but the iliac is by far the most common. This injury is next in frequency to luxation of the shoulder-joint, and is most common between the ages of thirty and forty-five years. The occurrence is very rare in the young, because the force calculated to induce such an injury would rather lead to separation of the epiphysis of the bone, owing to its imperfect development and consequent inability to resist external injury. It is uncommon in the old, because of the brittleness of the bone, which renders it more liable to fracture. The case is a remarkable one. I have never seen this form of dislocation at this age, and I do not think there is a similar one on record. Several cases occurring at the age of twelve and eighteen months have been reported.

Now, gentlemen, you ask me what is the treatment in this case, and I emphatically tell you there is none. It is useless to make an attempt at reduction. There is no acetabulum. The natural cavity has been absorbed and filled up.

TRANSLATIONS.

FOREIGN BODIES IN THE ŒSOPHAGUS.

—At a recent meeting of the *Société de Chirurgie*, Guyon reported the case of a man twenty-three years of age who swallowed a silver five-franc piece. An emetic was administered a few hours later without success. On sounding the œsophagus the next day, repeated acts of vomiting followed. Swallowing caused a fixed pain in the neighborhood of the larynx. A few days later the exact position of the foreign body was ascertained by a resonating sound, and it was extracted. External palpation and laryngoscopic observation had failed to indicate the position of the coin.

Sée had observed a case of foreign body in the œsophagus which gave rise to serious

suppuration in the mediastinum. A child had swallowed a steel pen, which lodged in the lower part of the pharynx. In attempting to remove the pen it slipped and fell into the œsophagus. Some days afterwards it was ejected in vomiting. In spite of this, dysphagia, fever, and vomiting continued. The child became extremely emaciated, and ejected quantities of fetid pus. Under the use of chloral the child recovered after some time.

Giraldi remarked that in using Graefe's instruments for the extraction of coins from the œsophagus in children, not under the influence of chloroform, the coin may fall crosswise and give rise to bad consequences. By the use of anæsthetics, the extraction of such bodies may be rapidly and easily accomplished, with the aid of Graefe's instruments. For that reason Giraldi always uses anæsthesia in these cases. Paulet said there is one point where almost all blunt bodies, too large to fall into the stomach, are apt to stick. This is just behind the cricoid cartilage, at the cricoid sphincter.

In such cases as Guyon's, when extraction could not be accomplished, this is the point at which œsophagotomy should be practised. Pointed, rough bodies may lodge at any point; their situation, however, can be ascertained by external palpation, which causes pain.—*Centralbl. f. Chirurg.*, 1876, No. 23. x.

EXTIRPATION OF THE ENTIRE LARYNX, WITH FAVORABLE RESULT (Bottini: *Centralbl. f. Chir.*; from *Giornale della r. Accademia di Medicina di Torino*, 1875, No. 14).—Bottini displayed at a sitting of the Academy the patient, the preparation, and a galvano-caustic knife of his own invention.

The patient, twenty-four years of age, suffered from sarcoma of the larynx. He had begun to suffer fourteen or fifteen months previously from attacks of dyspnoea,—at first slight, later severe,—due to stenosis of the larynx. Tracheotomy was performed for the relief of these symptoms. At the time of this operation examination with the laryngoscope showed fleshy masses which filled the entire glottis, and through which the patient could only with difficulty force the breath. The application of caustic for enlarging the lumen of the passage to result unsuccessfully. Bottini found, somewhat later,

granulation-like, easily-bleeding vegetations of the glottis, which could be drawn by the tenaculum into the cavity of the larynx; he diagnosticated sarcoma, and recommended the galvano-caustic. An opening was effected, however, by means of a tin sound, which remained patulous during several months. Laminaria tents were attempted, but could not be borne, and in a few months matters were as bad as before: the tumor was harder; no air could pass through the glottis. Finally, an operation being decided upon, it was carried out, as follows:

An elastic canula having been introduced into the trachea, local anæsthesia was established by Richardson's apparatus. A median incision was made, extending from the hyoid bone to the opening into the trachea. At either end of this, cross-incisions were made to the inner boundary of the sterno-cleido-mastoidei, thus giving two rectangular flaps. The larynx was separated from the surrounding tissues and removed without difficulty, but the retraction of the parts caused compression of the vagi with threatening dyspnoea and orthopnoea. Bottini was obliged to divide in the greatest haste the conoid ligament and separate the cricoid and thyroid cartilages, thus giving rise to hemorrhage and fainting on the part of the patient. Finally, however, the bleeding was stopped by ligature and galvano-caustic, and the patient recovered. Bottini showed to the members of the Academy a galvano-caustic knife which in future operations might prevent excessive hemorrhage.

x.

CASES OF "LEUKÆMIA."—F. Schmu-ziger (*Centralbl. f. Chirurgie*, 1876, No. 24; from *Arch. der Heilk.*) describes two cases of leukæmia lymphatico-lienalis (et myelogenæ) observed at the medical clinic in Zurich and carefully examined post mortem. One was that of a woman, forty years of age, in whom the disease had not reached the second stage, when she succumbed to an apoplectic seizure. The other was that of a boy of eleven years, in whom the disease had passed the second stage. The conclusions drawn by the author are of interest in connection with the question whether the white blood-corpuscles are not formed and supplied from the marrow and not the spleen.

x.

CATHETERIZATION OF THE LARYNX IN DIPHTHERIA AND CROUP (Hüttenbrenner:

Fahrbuch der Kinderheilkunde, Bd. viii., Hft. 1 and 5).—After a description of the method of operating and the difficulties and impediments met with, H. formularized his conclusions as follows: 1. At every introduction of the catheter into the larynx, circumstances may occur which may asphyxiate the child. These may be due to a want of proper assistants, to the difficulty of the introduction itself, or to the loosening of pieces of false membrane, which cannot be expelled, and which fall into the trachea. 2. Continued catheterization is injurious, since it by no means does away with the necessity for tracheotomy, and calls for great exertion of the muscular powers of the child. 3. Injuries of the mucous membrane of the mouth by the introduction of the wedge needed to keep the mouth open can scarcely be avoided, and thus bleeding surfaces are formed, which in a few hours are covered with exudation. 4. Its effects are but temporary. 5. The proper performance of the operation calls for numerous trained assistants, and they are not usually readily procurable in private practice. 6. Catheterization of the larynx can be only once performed, and then only when death is imminent, for the purpose of gaining time. Except for this reason, the operation should not be performed in the treatment of croup, since it by no means does away with the necessity for tracheotomy.

W. A.

ACTION OF ANÆSTHETICS ON MUSCLES AND NERVES (Conley: *Centralblatt für Chirurgie*, 1876, No. 28).—In order to ascertain the action of anæsthetics on the muscles and peripheral nerves, C. killed many animals by various methods. He found that when death was produced by ether, chloroform, or chloral, the physiological properties of nerves and muscles were preserved much longer than when death was due to other causes. The most noticeable in this respect was the action of chloral. According to his view, the reason of this symptom must not be sought in the action of the anæsthetics on the spinal cord, but in a direct modification of the muscular and nervous elements through the blood. He thinks that this action is similar to that seen in poisoning by carbonic oxides.

W. A.

OSTEOTOMY IN THE TREATMENT OF RACHITIC CURVATURES (J. Guérin: *Bulletin de l'Académie de Médecine*, 1876, No. 141).—In reference to a communication of

Boeckel's in reference to thirty-four cases of osteotomy, among which were some operations on account of rachitic deformity, G. alludes to the fact that he as early as 1843 called attention to the favorable results attending such operations in cases of this class. He distinguished two methods of operating,—osteoclasy, indicated only while the bone is still soft, and osteotomy. When the bone is soft it can readily be broken and made straight, and consolidation follows under the influence of ossification, which soon occurs. Later, when the bones are firm, and even denser than healthy bone-tissue, subcutaneous osteotomy must be resorted to.

In cases in which there is a sharp angle due to previous fracture of the diseased bone, he chooses a time at which there is still to be found as the remains of the old callus an elastic tissue which has not been ossified. Guérin's method of operating is distinguished from that of his imitators by the fact that he operates only at the time named above, they at all times; and he also makes a subcutaneous section of the bone, while they cut out a piece with chisel and mallet, and so shorten the bone. W. A.

CÆSAREAN SECTION PERFORMED ON ACCOUNT OF CARCINOMA OF THE CERVIX AND VAGINA (Tauffer: *Deutsche Med. Wochenschrift*, 1876, No. 8).—This operation was followed by a fatal result, but the results of the post-mortem examination, which demonstrated the unreliability of catgut for uterine sutures, are of special interest. The patient died on the third day after the operation, and the following conditions were found. The body was but slightly distended, the wound of the abdomen was almost entirely united, and in the abdominal cavity was a quantity of fluid and clotted blood. All the organs were hard and anæmic. The uterus was well contracted; the edges of the wound in it were gaping, and covered with clots. The catgut threads on both sides were still present in the tissues, but the knots upon them were either loose or had slipped and formed wide loops. Peritonitis was not found. The cervical portions of the uterus and the vagina were filled by a grayish-white, hard, stinking mass, which had to some extent undergone a cheesy degeneration. Death had been due to hemorrhage, which the catgut sutures had failed to control. W. A.

TREATMENT OF HYPERTROPHY OF THE PROSTATE (Dittel: *Centralblatt für Chirurgie*, No. 27, 1876).—Dittel takes issue with Thompson as to the method of treatment recently advised by him in those cases of prostatic hypertrophy in which urination is interfered with and the almost constant use of the catheter is indicated. He asserts that this mode of treatment is not new, and that the preparatory incision into the abdominal cavity is unnecessary, and ought only to be used in very fat patients. The determination of the size of the prostate during life, when it is not excessive, is not possible, and on this account changes in its size are ascertained with difficulty. It is difficult also to decide whether we have to do with hyperæmic or hypertrophic enlargement of the gland; and this too renders an accurate determination of the results of treatment still more difficult. Dittel alludes also to the parenchymatous injections advised in the same affection by Heine, and says that he himself has by this method never caused improvement, but has frequently seen acute prostatic infiltration and suppuration caused. W. A.

MORBUS BASEDOWII (R. Rösner: *Centralblatt für die Medicinischen Wissenschaften*, xxi., 1876).—Among the six cases of this disease, of which very minute histories are given by R. Rösner, two of them (both patients were women) are especially worthy of notice, inasmuch as the symptoms of the disease were preceded by definite symptoms of an affection of the sympathetic system.

The patients suffered from hemicrania and a neuralgia mesenterica or enteralgia, causing pains in the abdomen, followed by purging, and this in turn by entire relief. One of the patients also suffered from typical urticaria. W. A.

TRAUMATIC TETANUS (Kretschy: *Wien. Med. Wochenschrift*, 1876, No. 19).—The patient had wounded the last phalanx of the fourth finger with a piece of glass, and after cicatrization had taken place, and sixteen days after the injury, tetanic attacks began. These attacks became more severe, and were caused by pressure on the scar, by loud talking, etc., and lasted about thirty seconds. On the tenth day, the injured phalanx was amputated, and four days later all the symptoms had disappeared. Nothing was found in the cicatrix which would account for the occurrence of tetanus. W. A.

MEDICAL TIMES.

PHILADELPHIA, OCTOBER 14, 1876.

EDITORIAL.

THE AMERICAN MEDICAL ASSOCIATION.

THERE has rarely, if ever, been a stronger contrast than that offered by the two medical congresses which met here during the past summer. The National Association accomplished nothing; indeed, might almost be said to have been nothing—worthy of being. The International Association accomplished a great deal, probably as much as any similar body that ever met, and was almost everything that could be desired. There can be no doubt that the American Medical Association fell below its usual average in the character of its members, because many of the most noted, not being able to attend both meetings, preferred the international assembly. Still, if the Louisville Convention of last year be compared with the September meeting of this year, the result is immensely in favor of the latter. Very many times has the question been asked, "Why cannot we have such meetings of the American Medical Association?" and to every well-wisher of our national body the answer still remains a serious matter. There can be no doubt that the foreign members of the international meeting, although comparatively few, lent a great deal of dignity and force to the body. True is it, also, that the peculiarity and rarity of the occasion, and the hope of meeting distinguished foreigners, aided greatly in drawing the *élite* of American physicians. Nevertheless, the comparative failure of the National Association is so great that some other causes for the superiority of its rival must be sought. Such causes seem to us clearly to have existed in the manner of organization of the International Congress, and chiefly in the pre-existence of a definite,

earnest, executive body, who prepared a most wise programme of action, and announced sufficiently beforehand the subjects to be discussed, the names of those who were to open the discussions, and the chief points to be made in the respective openings.

Dr. Jones may have little interest in medical congresses, but he is burning with enthusiasm concerning sewer-traps, puerperal fever, or some other subject, and rouses like a lion from his apathy when he learns that Dr. Smith is to lead off upon his favorite theme.

It is plain that the definite announcement of papers upon fixed topics by men of acknowledged rank is far more likely to attract than the expectation of volunteer articles by medical nobodies. Further, very few men are prepared to discuss any serious question usefully without previous warning or preparation.

If any lesson is to be drawn from the experience of September for the guidance of the "fathers" of the American Medical Association, it is the necessity of a well-selected body of men, a committee or a commission, who shall supervise, or rather prearrange, that which is to be done at the convention, and who shall announce sufficiently the precise character and personnel of the work and workers. The organization of the commission which prepared for the International Congress was twofold. The General Commission arranged the general plan of the work and then formed committees on Sections, which prepared the work to be accomplished by their respective Sections. The general plan for the transaction of business should be stereotyped by the American Medical Association, and, consequently, committees on Sections are all that would be required from year to year to arrange each winter for the following summer's meetings.

In another column, under the head of "Notes and Queries," we print a plan

which originated with a well-known, although for the present nameless, member of the Association, and which appears to meet the requirements of the case. Objection might be taken to some of its details, but these could be modified as seems best after discussion. The opportunity of raising the Association to a position worthy of the country by the application of these rules seems to be so good that we sincerely hope that Professors Gross, Davis, or other of the mighty men will take hold of the subject with vigor and determination.

A CURIOUS instance of the depth and breadth of the feeling produced in England by the Turkish atrocities is found in the circumstance that the London *Lancet* of September 16 has a political leader of nearly a page in length on the subject.

CORRESPONDENCE.

LONDON LETTER.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

THE great heat which prevailed some weeks ago has given place to an autumnal chilliness, which has lighted many drawing-room fires, so that there has not been an opportunity for testing your views as to the pathology and treatment of summer diarrhoea. Your leader of August 5 has attracted a good deal of attention here, and, so far as I can learn, there is full agreement with what you have written. The matter, indeed, has come home to many who suffered during the recent intense heat from diarrhoea for which they could not account. The associations of intense heat and diarrhoea are too palpable, when once they have been pointed out, to escape recognition. The observations of G. C. Comegys have indeed laid the laity as well as the profession under a debt of gratitude to him.

The other matter of your leader, viz., the thermic relations of heat-apoplexy, is in perfect accord with the observations of Indian practitioners. The treatment of this condition by ice and cold baths is doubtless very satisfactory where such measures are at hand. They are, however, unattainable for cases occurring among troops on the march; and in cases of heat-apoplexy occurring then it has

been found a good practice to use subcutaneous injections of quinine. By this measure a number of recoveries have been secured in very severe cases. This plan originated with Surgeon Major A. R. Hall, of the Royal Artillery, and not only has it been found successful in India, but a case was recorded recently where a patient, stricken down with heat-apoplexy, at Bath, was so treated with perfect success.

Surgeon Major Hall is known to the profession by his advocacy of the treatment of cholera by vascular depressants. Not only had he seen much of this malady in India, but he underwent a severe attack himself. From his varied experience he arrived at the conclusion that the commencement of the morbid process was severe spasm of the muscular walls of the arterioles, by which the pulse was almost obliterated while the heart was acting tumultuously and forcibly; the spasm in the renal and hepatic vessels cutting off the urine and the bile, while the fluids of the blood were squeezed out of the portal section of the venous system, as the point of least resistance. Having come to this conclusion, it seemed a rational practice to administer chloral hydrate, whose power to relax and dilate the peripheral arterioles had recently been demonstrated. This was done, subcutaneously, with very satisfactory results, even during a rising attack of cholera, the most severe test to which it could be subjected, not only by Mr. Hall, but by others. His views have met with much approval by many here who are competent to judge in the matter, and are valuable from their physiological bearings. Surgeon Hall is now under orders for India, where he is to give his plan a thorough trial, and test further the efficacy of the chloral hydrate, as well as nitrite of amyl inhalations, calabar bean, and other vascular depressants, in cholera.

The schools are all preparing for another winter campaign, and as the different addresses will probably furnish the material, to a large extent, at least, of my next letter, this one will be taken up chiefly with practical subjects.

Dr. Brown-Séquard has lately been delivering a number of lectures on the nervous system and its affections, at the Royal College of Physicians, and elsewhere. They have, as a matter of course, been attended by large numbers of the profession; but his views have not met with that hearty reception which greeted them of yore. This great physiologist of the nervous system advocates and promulgates views so very different from those held by the leading authorities on it of the present day, that there is considerable hesitancy exhibited in accepting them.

One of the most troublesome and irritating ailments which is brought under the practitioner's notice is the not uncommon one of pruritus vulvæ. The suffering, the intolerable

itching, and the irresistible inclination to scratch or rub in order to attain relief, with all the miserable consequences which may and often do result therefrom, make this one of the greatest miseries to which women are subject. It is interesting in its causal relationships as well as its symptoms. It is found in some women along with a turgid mucous membrane and the hyperplasia of the genital surfaces caused by syphilis. In these cases it is well to subject the patient to a course of mercury or iodide of potassium, and in addition to this to apply the ordinary black wash on a strip of lint, especially on going to bed. By such measures the parts are greatly relieved, and the patient made comfortable. In other cases, again, the pruritus is set up by, or in consequence of, a discharge which keeps the surfaces moist. In these cases the vulvæ are bathed in a secretion coming from the vagina, at times arising in the vagina, at other times of uterine origin. In these latter cases the uterus is found large, heavy, and congested, with a hard os, and a good deal of secretion oozing from the cervix. What betwixt the hyperæsthesia of the parts from their being constantly bathed in moisture, and the irritant qualities of the discharge itself, great excitement is kept up, which the friction resorted to only temporarily allays. In such cases the most scrupulous cleanliness, the use of the bidet, and the vaginal douche are indicated, while borax applied locally is of great service.

The most interesting causal associations, however, are to be found in the pruritus of diabetic patients. This matter formed the subject of a communication to the Harveian Society, last session, by Dr. Alfred Wiltshire, and recently a paper by Prof. Winckel has appeared on the same subject. It seems that the diabetic urine is not only a source of irritation in itself, but, if allowed to remain unremoved, favors the development and growth of a vegetable parasite which aggravates matters very much. The parasite is a form of oidium, which, like others of this class, is readily destroyed by sulphite of soda. In these cases the parts should be carefully washed after each act of micturition, and then a solution of sulphite of soda applied. A strip of lint dipped in a solution of borax may advantageously be inserted betwixt the vulvæ at bedtime. In all cases of pruritus vulvæ, indeed, it is well to bathe the parts immediately after the urine has been voided, as it always forms a source of irritation from the salts it contains. In all cases two full doses of the bromides are indicated. Its anæsthetic properties upon peripheral nerve-endings are well shown in the case of the pudic nerve; and in all cases of excitement in this nerve bromine in some form is to be resorted to. It largely does away with the excitement kept up betwixt the local periphery and the sensorium, and so destroys, to a great extent, the effects of habit.

By its use, and the local measures described, much may be done for a class of cases too commonly found exceedingly intractable. In all cases it is well to keep the bowels carefully unloaded; and this is very important at bedtime. A load in the lower bowel always keeps up and maintains a condition of vascularity in the adjoining parts which is most undesirable.

The relations of pruritus vulvæ to diabetes are of great interest. It may indeed be the only indication of a state of glycosuria where the proportion of sugar in the urine is not large. Such a condition exists in many persons where the drain is never noticed; but in women complaining of pruritus the urine should always be carefully examined. The old impression that diabetes is an incurable and necessarily fatal disease is now exploded, and works on diseases of the kidney, etc., all now narrate cases of transient glycosuria where no injury whatever was done to the organism. Several such cases are related by Wm. Roberts, of Manchester, in the new edition of his work on Urinary Diseases. Where this condition of glycosuria is overlooked, the case may linger on for years, the treatment being very ineffective, because not strictly adapted to the case in hand. The presence of ascarides or thread-worms in the rectum is also most mischievous in its effects in maintaining local pruritus, especially if the worms find their way out of the anal orifice at night and creep over the perineum to the fourchette. This matter should never be neglected in the pruritus of children and young girls. Of course the more debilitated the system the more these parasites, vegetable and animal, thrive; and one factor in their removal is to improve the general condition of the organism in which they show themselves. In ordinary cases of diabetes much may be done by a regulated dietary, especially the avoidance of cane sugar. One case is well known to me where the glycosuric patient can eat starch with impunity, but where indulgence in sugar is immediately followed by an outburst of the ordinary symptoms. Because a patient looks well, has no thirst, dryness of skin and throat, or great increase in the bulk of urine, it will not do to dismiss the possibility of the presence of diabetes, without testing the urine, if the patient have pruritus vulvæ.

The treatment of internal hemorrhage needs some revision and the application of the teachings of physiology. The use of astringents is much aided by the addition of some sulphate of magnesia to the ordinary mixtures, which is a good and powerful astringent elsewhere than to the intestine. Its effect upon the bowels makes it a useful addition to ordinary astringent mixtures, which otherwise would act prejudicially upon the bowels if this effect were not counteracted. In addition to the wonted remedies, quiet and cold fluids are the measures usually adopted. But there is

room for some difference of opinion as to the use of external cold. This may be applied locally with advantage in many cases; but it is the question of the general application of cold that calls for attention. In hæmoptysis and metrorrhagia (as well as menorrhagia), it is advised in all text-books to keep the patient generally cool. The wisdom of this is very questionable. If the peripheral ends of the systemic arteries are generally contracted, there must be a flux of blood to the internal parts, and a rise of the blood-pressure on them. Thus, in hæmoptysis, if the body generally be cold, and especially the highly vascular hands and feet, the blood-pressure must be raised in the pulmonic circulation and the hæmoptysis be increased. A case under care some months ago showed this very clearly. The girl was cold and chilled, the weather being very bad and the temperature low. Her hands and feet were gelid and corpse-like. In addition to the ordinary astringents and cold fluids internally, the external application of heat was recommended, and hot bottles were put to the feet. As soon as the girl became, as her mother expressed it, "as warm as a toast," the hæmoptysis ceased, and has never returned. The dilatation of the systemic vessels relieved the pulmonic circulation, and the hemorrhage ceased. Again, some time ago, a patient had a severe catamenial loss, and the feet were like ice. A hot bottle soon warmed them, and as they grew warm the hemorrhagic flow was lessened.

The relation of the condition of the blood-vessels of the lower limbs to that of the pelvic vessels is very important. Dr. Dewees has told us of the practice of putting the feet into cold water deliberately to arrest the menstrual flux, and a case, where such immersion of the feet, for another purpose, was followed by arrest of the flux, came under notice quite recently. The contraction of the blood-vessels so induced is not confined to the lower extremities, but extends into the pelvis. Consequently in some cases such application of cold may be found useful. In other cases, however, a different line is to be pursued. Where the surface generally is cold, the blood is driven, in a large measure at least, from the cutaneous surface, collects in the viscera, and so adds to the existing hemorrhage. A very illustrative case occurred lately. The patient had aborted, and, being compelled to move about too soon, a sanguineous discharge had persisted for ten weeks. She was put to bed, and cold fluids were given internally, with aromatic sulphuric acid, sulphate of magnesia, and infusion of rhatany. The weather suddenly became very cold, and the hemorrhage increased rather than decreased. It was then pointed out that the extremities were very cold, and the patient declared that when she was warmer the loss was less, since she became cooler it had increased. She was ordered to have on some

more bedclothes, and especially the feet to be kept warm. Shortly after this the flow sensibly diminished, and in seventy-two hours it was nearly entirely gone. The astringents and the cold fluids internally were continued.

The conclusions furnished by these cases are as follows. The imbibition of hot fluids tends to dilate the vessels of the chief viscera, and so to increase any existing hemorrhage: consequently it is well in such cases to see that all the fluids taken be cold or even iced. It is equally certain that general cutaneous coldness may increase internal hemorrhage, while the local application of cold may affect the blood-vessels of distant parts. But at the same time chilled extremities may keep up internal hemorrhage, and in many cases it will be found good practice to apply heat externally to one part while cold may be applied to another. Thus, in cerebral congestion the feet are put into warm water, while cold is applied to the head, with good and satisfactory results. The experiments of Max Schuler have demonstrated that the application of vesicants to the surface affects the calibre of the cerebral blood-vessels; and the blisters to the calves of the legs combined so commonly with the above measures in cerebral congestion are probably useful. Nevertheless, these remote actions must be subordinate to the great and broad laws of blood-distribution; and if there be hemorrhage from an internal part combined with chilled and bloodless extremities, to restore the blood-flow through these parts must be an efficient means of reducing the hemorrhage. It is clear enough that it is not desirable in all cases of hemorrhage to keep the surface cool: cases arise where the surface must be kept warm while all ingesta may be cold with advantage.

There is a slight epidemic of typhoid fever in London at present. The form, however, is a severe one, and the proportion of deaths is high. There is no special peculiarity or form assumed.

The guardians of the Keighley Union, who declined to put the Vaccination Act into force, were committed to jail, and were confined in the debtor's division of York Castle. The demonstrations which accompanied their arrest and removal inspired them with a sense of martyrdom, which, however, evaporated amidst the routine of their retreat and the firmness of the magistrates. So the other day they were admitted to bail on condition that they conducted themselves prudently when out, and did not get up popular agitations. The anti-vaccination party have not got the political capital out of the move that they anticipated.

Prof. Ferrier's work on "The Functions of the Brain" will shortly be out. It is illustrated by some exquisite plates, and will be eagerly looked for by those who are interested in the nervous system.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, JUNE 22, 1876.

THE PRESIDENT, DR. WILLIAM PEPPER, in the chair.

Heart showing anomalous arrangement of pulmonary valves, these being four in number; fenestration of pulmonary leaflets. By Dr. J. C. WILSON.

THE specimen was removed from the body of a middle-aged woman, who was admitted dying into the Philadelphia Hospital.

There are four semilunar valves at the orifice of the pulmonary artery, three of which are nearly or about the normal size. The fourth resembles the others closely in contour and formation, save that in all its measurements it is smaller, being both narrower and less deep, and is, so to say, crowded in between two of its fellows.

The heart is hypertrophied, especially in the right side; the other valve-systems are normal. A point worthy of attention is the marked thinning of the pulmonary semilunar leaflets in the region known as the *lunula*, and in some of them the separation of the tendinous border of the valve, forming a slit-like opening or *fenestration*. This, viewed in connection with the right ventricular hypertrophy and the fact that the right lung was so compressed by a vast pleural effusion of long duration as to form a small shrivelled mass, and so afford great if not almost complete obstruction to its circulation, goes far to support the theory that such valve-fenestrations are due to long-continued, extensive arterial tension. They are encountered, as the gentlemen of the Society are aware, with great frequency in the aortic valves, but this is the first instance in which I have seen them in those of the pulmonary artery.

The excess in the number of valves is a rare malformation. Up to 1851, Peacock had collected nine instances of it, eight of which were located in the pulmonary valves. Deficiency in the number is relatively of much more frequent occurrence.

Such valve-anomalies as this are of greater interest, perhaps, to the teratologist or embryologist than to students of pathology; yet I have not hesitated to bring the specimen before you, first, because it is a rare one, and in the second place, in the hope that some among you may be able to inform us at what period in development the malformation has taken origin, and whether it be due to perverted growth alone or to ante-natal disease. The condition of the right chest alluded to was due to carcinoma of the pleura, of the variety scirrhous, as was demonstrated by sections prepared for me by Dr. Van Harlingen. The specimen has not been preserved, but

was of great interest as an example of *primary cancer of the pleura*, the occurrence of which is denied in most of the text-books.

Dr. PEPPER called attention to the fact that the appearances at the point of insertion of one of the small leaflets in the specimen showed conclusively that this seeming malformation was the result of disease. He also alluded to the comparative rarity of fenestrations in the valves of the right side of the heart, and to the fact that although these small perforations may occasionally be the result of malformation, they are far more frequently found associated with conditions that indicate that there has been increased strain upon the valves.

Aneurism of the transverse portion of the arch of the aorta. By Dr. J. C. WILSON.

The specimen was removed from the body of a black man, who died in the Philadelphia Hospital.

J. P., æt. 35, born in North Carolina, a waiter by occupation, was admitted April 28, 1876. His illness was said to be of four months' duration only. It began, he stated, with a cold and cough; had never been attended by fever or pain, except the distress due to shortness of breath and headache. Shortly after his admission to the ward the following notes of his condition were taken:

A medium-sized man; muscular, but without fat. Expression anxious and distressed. States that he has been very short-winded for several weeks; cannot lie down to sleep, and suffers from headache. His voice is husky and laryngeal, but when he musters breath enough he speaks for a moment clearly and from the chest, indicating an obstruction below the vocal cords. Nevertheless, a laryngoscopic examination is made; nothing abnormal is seen in the larynx, and all efforts to illuminate the trachea fail, because of his urgent dyspnoea and inability to aid me in the inspection. This dyspnoea is the most striking phenomenon in the case, the most marked symptom of disease. The respiration is so difficult, so irregular, so noisy, that to give the number of breath-acts in a minute would be misleading, and, indeed, scarcely possible. With each act of inspiration the superior portions of the chest, the supra- and infra-clavicular spaces, upper intercostal lines, as well as all its lower regions of both cartilages and interspaces, sink deeply inwards; the mid-thoracic region alone seems to expand. Hence the shape of the chest is that which is seen in a child with symmetrical obstruction of the upper air-passages. There is frequent ringing cough, with abundant expectoration of frothy mucus. During the intervals of this we hear almost unbroken stridous, loud, ringing, sonorous râles, which, while they retain in general their constant character, vary with inspiration and expiration, and from moment to moment. It is evident that their seat of origin is in the trachea, for the reason that whether heard at

a distance over the windpipe, or on listening over any part of the chest, their character is the same, but their point of greatest intensity is always in the supra-sternal notch. They cover up the proper breath-sounds of the lungs, and make the sounds of the heart obscure. The percussion-note over the lungs is everywhere hyper-resonant. The upper sternal region is prominent, full, but without distinctly localizable tremor. All the muscles of the anterior cervical region are hypertrophied in an extraordinary way; this probably in consequence of the laborious breathing.

There is obscure dulness beyond the usual limits in the upper sternal region, but of its precise boundaries, even after repeated examinations, I cannot be certain.

The heart is certainly displaced downwards. Its sounds are heard with difficulty, because of the noisy breathing, but seem normal. No murmur is heard over the heart, the great vessels, or in any part of the chest anteriorly or posteriorly,—this after repeated examinations. Nor is there any point at which any abnormal pulsation or any thrill can be detected. The pupils are wide, but of the same size, and respond quickly to light. The radial pulses are small, tense, but even. The action of the heart is frequent, and a little irregular.

At the root of the neck, namely, above the clavicles, on the right side there is diffuse, feeble pulsation; on the left side, none, even when the carotid was carefully sought. Add to those phenomena a little difficulty in swallowing, but no pain of any kind except headache, and the symptoms presented by the case are complete. Digestion good; kidneys acting, urine non-albuminous, temperature normal. Syphilis, gout, rheumatism, intemperance denied; no history of any strain or "giving way," nor of any kind of a shock.

It was easy to make a diagnosis of tumor pressing upon the trachea; indeed, it was easy to say, in view of the sex of the patient, his age, his rapidly-progressing illness, the seat of the vague tumor, the displacement of the heart, the disturbance of the circulation of the carotids, and the peculiar character of that of the radials, that an aneurism of the thoracic aorta was present. But was it possible to know it? I think not. And I report the case as one in which it was impossible to find signs to prove a diagnosis of which we were confident. The treatment ordered was bromide of potassium in full doses till the excitement due to prolonged wakefulness and anxiety was somewhat allayed, and sleep was possible,—results which were happily attained in the course of a few days; afterwards iodide of potassium. His diet was liquid and semi-liquid, of moderate quantity. Save that he was calmer and slept part of each night, his condition was the same till May 25, when he suddenly died in asphyxia.

The *post-mortem* discovered the specimen which is laid before you. You behold a sac-

culated aneurism, the size of a small orange, springing from the upper surface of the transverse portion of the arch of the aorta, and giving origin to the innominate and the left subclavian and carotid arteries, of which the last is occluded by a firm organized clot. The sac, save at its upper part, where there are some adherent fibrinous laminæ, is filled at the post-mortem with recent clots; access to it is by a constricted opening. The aorta is elsewhere healthy, the heart slightly enlarged; its valves are normal.

The trachea just above its bifurcation is flattened from the right and forwards, backwards, and to the left; its mucous lining is deeply congested. The lungs are emphysematous at their margins. There is no erosion of the sternum.

I beg especially to call attention to the following points as of interest:

a. As negative points in the clinical history, absence—1, of impulse; 2, of thrill; 3, of murmur; 4, of pain, either purely aneurismal or from pressure.

b. As obscuring any sign that may have existed and escaped detection, 1, constant stridor; 2, hypertrophy and thickening of tissues of neck and upper part of chest; 3, thickening of upper wall of sac by laminated clots; 4, constricted inlet to sac, as allowing of retardation of the blood-stream filling it.

Scirrhus cancer of the rectum, with ulceration into the bladder and colloid degeneration. By Dr. JAMES TYSON.

C. W., aged 25, a house-painter by trade, consulted me early in June, 1875, for growing weakness and constipation. Thinking that probably he was suffering from lead-absorption, I ordered him iodide of potassium and a tonic and aperient pill of extract of nuxvomica, rhubarb, aloes, and belladonna. He returned about June 20, reporting that he felt stronger, but that his bowels continued very troublesome. A pill at bedtime seemed to produce one or even two movements of the bowels before breakfast, without, however, giving relief to a sense of fulness just within the anus, which was very annoying. Sometimes, again, he would have two, three, or even four stools after dinner, which were, however, small and unsatisfactory, giving no relief to the sensation described. Without examining the rectum at this time, I concluded he had hemorrhoids, as he himself suggested, and ordered an ointment of galls and stramonium, the iodide of potassium continued, but substituted a compound liquorice powder for the pill.

On July 2 he reported that he was much better in all respects, although less so as to his supposed hemorrhoids; but as his bowels were so much better these also annoyed him less. There had, however, been some little bleeding from the piles.

On July 9 he reported some looseness of the bowels, with more or less constant disposition

to stool. In consequence of this the dose of the liquorice powder was diminished. The iodide was also omitted, and a mixture of dilute nitro-muriatic acid, pepsin, and strychnia ordered.

On July 16 he was again much better in all respects. The improvement, however, did not continue, and there was added a sort of incontinence of the bowel, as the result of which there would be small involuntary movements, and attempts to pass flatus would be followed by small fecal discharges. I now examined his rectum with the finger, and found just within the anus a thickening which extended almost entirely around the gut, but appeared smooth and covered with mucous membrane. Apparently, it did not extend upward farther than two inches. The withdrawal of the finger was followed by a thin fecal discharge. I now sent him, on account of the surgical nature of his disease, to my friend Dr. C. T. Hunter, who unhesitatingly declared the condition to be one of carcinoma. He was informed of the suspected nature of the growth, placed upon tonic and supporting treatment, and for six months his condition did not materially change. He perhaps grew weaker, but *very* slowly, and he continued to visit me at my office at intervals, and even occasionally did a day's work.

January 17 he was again placed upon the iodide of potassium, gr. x, 3 t. d., with the intention of continuing it as long as possible and thus determine whether it would have any effect on the growth. On the 3d of March he told me he thought he *passed wind through his urethra*. No fecal matter, however, was passed in this way, although he was constipated. The latter condition now annoyed him a good deal, but he was easily relieved by small doses of sulphate of magnesia before breakfast. It soon became certain that a communication between the bladder and rectum existed. He continued slowly to grow weaker until May 29, when he sent for me, being too weak to leave the house. I found him suffering with extreme abdominal pain, which was not, however, constant; his bowels had not been open for a week, and he had attacks of profuse vomiting of liquid matter, but without fecal odor. Purgatives and injections failed to afford relief, and, singular to say, the latter were retained, not a drop of two large ones passing the anus; and yet, as far as the finger could reach, there appeared to be no obstruction of the bowel. The belly was enormously swollen and tympanitic. He was finally put upon one-half grain doses of calomel with one-quarter grain of opium every hour. These were ordered on the 2d of June, and after about fifteen grains of calomel had been taken he began to have copious evacuations of fecal matter through his urethra. These kept up for a couple of days, the quantity discharged being very large, and, although inconvenient, the passage was ac-

complished with tolerable ease. It became necessary, finally, to check the discharges by opiates. During this time there was no discharge whatever by the anus, and the belly continued swollen and painful. He gradually sank, and died quietly June 10.

The *post-mortem* examination was made on the 12th. The body had suffered considerable emaciation. On opening the abdomen the omentum was found much congested, the larger vessels being cord-like in their distention with blood; the wall of the bowel was also congested, but there was no peritonitis except in the pelvis, whose contents were glued together. The rectum and bladder were removed in relation. The lower end of the former was the seat of extensive thickening and colloid degeneration; as the bowel was ascended the proportion of the latter grew less, and finally became circumscribed in cysts of gradually diminishing size until they reached that of two to four lines in diameter, so that they could easily be cut in thin sections and their formation minutely studied. The cancerous infiltration, which invaded especially the submucous connective tissue, was thickest just within the external sphincter, where also the colloid degeneration was most complete,—masses three inches in diameter separating from the gut on its removal,—gradually diminished in thickness, until it disappeared at least eight inches above the sphincter muscle. The perforation in the rectum, less than half an inch in diameter, was found about three inches above the external sphincter, and passed into the bladder a very little to the left of the median line, on a line drawn between the two orifices of the ureters. The opening was about the same size as that in the rectum. The bladder appeared small and contracted, and was partially filled with semiliquid fecal matter.

Histologically the growth exhibited the elements of the hard or scirrhous variety of glandular cancer, the fibrillar connective tissue being largely predominant, although well-defined alveoli with epithelioid arrangement of contained cells were sufficiently numerous in thin sections.

As already stated, the smaller cysts filled with colloid matter afforded an excellent opportunity for the minute study of this degeneration. In these cysts were found cells in different stages of metamorphosis, including perfect colloid spheres and those of the characteristic seal ring.

Calculus of unusual size passed by the urethra.

By DR. TYSON.

The gentleman from whom passed this calculus is perhaps 38 years of age. He had his first attack of nephritic colic in January, 1869, another, very severe, in July, and sharp attacks, lasting from one to many hours, almost weekly during the fall of the same year. In the first two he was attended by physicians, in the subsequent ones he

treated himself by hot applications and baths. Some time during this period he passed a small stone through the urethra. At the close of 1869 or beginning of 1870, after this series of attacks ceased, he first became unable to sleep through the night without rising to evacuate his bladder. Some time after this, also (the exact date he cannot locate), he began to experience a stinging sensation during micturition, together with a frequent desire to pass water during the day.

In the early spring of 1872, I attended him for the first time in an attack of nephritic colic. An examination of the urine at this time revealed neither pus nor an undue quantity of mucus. Similar but slighter attacks occurred during the fall of the same year, but no calculus was then known to have passed through the urethra.

In January, 1874, he consulted me for the symptoms of stinging urethral pain and frequent disposition to pass water, which had gradually increased during the year previous, so as to have become very annoying. An examination of the urine at that date revealed an alkaline reaction which was probably secondary, a sp. gr. of 1018, and a moderate deposit, which was opaque, white, and shown by the microscope to be made up of pus, red blood-disks, crystals of the triple phosphate, with amorphous phosphate of lime. The urine was also albuminous, depositing about one-tenth its bulk by the heat and acid test. Numerous other examinations resulted similarly, and it was found that the urine at the moment of secretion was acid, but rapidly became alkaline in consequence of the large amount of organic matter present. The presence of a quantity of blood so small as to be detected only by the microscope, and again so large as to be evident to the naked eye, was constant. Of course, when the urine happened to be alkaline, there was added the dirty-hued glairy mass usually present under these circumstances.

On exploring the bladder with the sound, which was done on more than one occasion, it was found exquisitely tender, but no stone was detected.

At different times during the year he was treated by tannic acid, benzoic acid, and other remedies, and his bladder was washed out daily, at times with tepid water and at others with weak acid solutions. Perhaps through the latter means, which the patient practised faithfully himself, the symptoms of irritation of the bladder diminished; his days were quite comfortable, and he was compelled to rise only once during the night. His urine remained, however, unchanged.

About the 1st of March, 1875, the patient fell into a febrile state, characterized by a frequent pulse, warm and dry skin, with dryish tongue, and a feeling of great weakness. These symptoms, when not controlled by remedies, were almost constant for about two months,

and resulted in an appreciable loss of flesh. He was not under my treatment at the time, but from what I learned of his symptoms I felt misgivings that the conclusion I had come to with regard to his case—that there was a cystitis, and the cause of the purulent urine was wholly confined to the bladder—was not correct, and that there might be an impacted calculus in the pelvis of the kidney which caused the pus and the fever-symptoms, not unlike those of typhoid, from which he suffered. About the 1st of May, however, they abated, and his general health began to be restored. For two or three days previous to May 15 there was the most intense irritation of the bladder. The desire to pass urine was constant, while the obstruction was complete, necessitating the use of the catheter with which the patient always relieved himself. About one P.M. of the 15th, he sent for me, stating that he believed he was passing a calculus, that it was apparently lodged in the perineum. By the time I reached him, three hours later, the calculus exhibited had passed, followed by a hæmaturia which gradually diminished. On May 21, the urine six hours after passing was still phosphatic, contained a few blood-corpuscles, and was albuminous, containing one-fourth its bulk of albumen.

The calculus, before bisected, was nearly an inch long and half an inch wide, and phosphatic in composition. Since it was passed, Mr. Y. has enjoyed excellent health, and writes me on June 20 of this year, "I have no symptoms except such as may be revealed by the appearance of urine. I am not annoyed by frequent desire to micturate. In a sleep of eight hours I have to get up once. Occasionally, when very tired, I have slept the entire night." A specimen of his urine accompanying this note was faintly alkaline, contained an evident opaque white sediment, which proved to be pus on examination with the microscope, while the application of the usual tests precipitated a small quantity of albumen. Some cystitis, therefore, remains; whether it will ever disappear is uncertain. He has been under no treatment whatever since he passed the stone.

I believe the direct cause of the passage of the calculus was the constant catheterization for the purpose of washing out the bladder. Soft catheters were used, and of the largest size, so that finally the patient remarked that he had so dilated his urethra that he could scarcely retain his water.

The question of the date of the entrance of the stone into the bladder is an interesting one. There are two occasions on which this might have occurred. First, at the termination of the first series of attacks, late in 1869. Second, during the attacks in 1872, when I first attended him. The symptoms of irritation of the bladder date as far back as the beginning of 1870, although there was no

evidence of organic change in the bladder in the spring of 1872. These changes were, however, evident in January, 1874. There was no examination of the urine in the interval, although the symptoms of irritation of the bladder continued, and *some* cause must have produced them. If it was the stone, then another must have passed in 1872, have been voided without the knowledge of the patient, or still remain in the bladder. The latter is not likely, or there would not be the total abatement of symptoms. On the other hand, if we suppose the stone to have passed into the bladder at the end of the first series of attacks in 1869, then two stones must have come down at this period; for we have the history of one recovered at that date. On the whole, therefore, I am inclined to think this calculus entered the bladder at the end of the attack in March, 1872; although this would leave the symptoms of bladder-irritation between 1870 and 1872 unaccounted for. But as the conditions of the urine in 1872 pointed to no organic change in the bladder, and such change was developed between the attacks in 1872 and 1874, this view seems to me the more likely one. It must perhaps forever remain a matter of probability.

Tumor of the back and left shoulder and right lung, recurring within a month after removal of an epithelioma from the left side.

By Dr. A. F. MÜLLER, for Dr. R. W. DEEVER, who furnishes the following history:

"The patient, Mrs. W., aged 51, came under my care April 28, 1876, though I had seen her several times with Dr. Müller as early as November, 1875, when Dr. M. removed from her left side a tumor, which your committee pronounced an epithelioma. The wound healed kindly and promptly, and, whilst the pain in the side was removed, she complained of pain in the right lung, from the clavicle as low down as the nipple. Some time about December 1 she began to complain of pain in the right shoulder, and examination revealed a hard, smooth swelling between the shoulders. This continued enlarging to near the time of her death, and the pain only ceased some two weeks before dissolution, the pain in the right chest having subsided some ten days earlier. When I assumed charge of her, in April, she was confined to bed, and had been all winter, and was so weak that no *physical* examination was made. The slightest pressure gave rise to violent pain, either on the anterior or posterior portion of the chest, and attempts to raise her up in bed caused alarming dyspnœa. She had little or no appetite, and slept but little, though she was taking thirty-five to forty drops of Battley's solution every three hours, and *could not get along without it*. All efforts to change the opiate or even to use the article prepared by other druggists proved futile. Her bowels were moved regularly every day. She died June 17.

"Autopsy, twenty-five hours after death.—Rigor mortis well marked. Emaciation extreme. Great muscular atrophy. On opening the abdominal cavity the intestines were found largely distended with gas; some semi-solid fœces in the lower bowel; quite a considerable quantity of serous effusion in the peritoneal cavity (probably two quarts); no evidence of peritoneal inflammation. The line of Dr. Müller's incision in removing the tumor last fall remarkably smooth. The mesentery smooth and transparent; no glandular enlargement anywhere; stomach healthy; spleen normal; liver small and firm; thorax, some sternal adhesions, strongest on right half; the left lung healthy, and pleura smooth, except a few old adhesive bands in posterior and upper part of thorax. There were about two pints of serous effusion in this pleural cavity, and three pints in the right. The right lung was firmly adherent to entire line of third rib and upward; beneath this the lung was free and the pleura smooth. The lung was contracted fully one-half, and contained the round, nodulated tumor seen in the specimen. The pericardial sac contained nearly one-half pint of the same clear serum. Heart apparently healthy, and distended with venous blood. Uterus and ovaries normal, if we except a small cyst the size of a walnut on the right ovary. The surface of the kidneys studded with minute cysts, otherwise healthy. The tumor upon the back extended from an inch and a half on the right side of the spine, about the fourth dorsal vertebra, upward over the left shoulder, nearly to the clavicle, and into the cervical fascia an inch below the ear. Its upper margin was rounded and well defined, whilst the lower border was lost in the inter-spinal muscles. The tumor was so firmly adherent that it could not be torn loose, and had to be cut with the knife; but it did not involve the scapula or ribs."

The specimens were so badly preserved that they could not be referred to the Committee on Morbid Growths for microscopic examination.

REVIEWS AND BOOK NOTICES.

GENTLEFOLKS AND OTHERS. By JULIA DUHRING. Philadelphia, J. B. Lippincott & Co.

Miss Duhring, authoress of that very charming volume, "*Philosophers and Fools*," has just published a second work, "*Gentlefolks and Others*." The first met with a welcome, both from critics and readers, that must have proved very gratifying to the writer; the second, as we see, has not been allowed to pass without undergoing an ordeal commonly reserved by reviewers for that class of the literati which attempts to hew its way *sans façon*.

How aggressive Miss Duhring is in her per-

sonnel we have no means of judging. That she is versatile the pages we have read from her pen exhibit clearly enough. In one essay she is found using tools heavy as those employed by historians or by writers on science; in another we are led to admire the taste and delicacy with which are handled mental instruments whose nice direction requires keener judgment than that which guides the chisel of the sculptor or the brush of the artist.

Looking both closely and curiously at the chapters of this second book, and comparing what have been termed the "peculiar" views set forth in them with objections urged by the critics, we find our convictions take side with Miss Duhring. Particularly do we give her the adherence of our judgment on a point against which the attacks have been strongest. Our allusion is to the chapter on "Authors," in which its authoress advances the assertion that æsthetical productions destined to have most influence are produced with least premeditation and with least aid from the culture of scholarship.

We cannot but think that Miss Duhring has been very much misunderstood by those who have ventured to criticise her views; at least we must conclude either this, or that the fault-finders are themselves lacking in that mental cultivation on which they lay so much stress. No two things are more widely separated than Inspiration and Rhetoric. Homer, whose *Iliad* stands as the masterpiece of literature, knew no more of letters than did the rocks of his native Chios. The rhetoric of the chisel found itself able to do but little towards bringing from the marble the warm and effulgent ideals of Apelles. The poetry of John Bunyan—for the tinker wrote true poetry—was not composed after any form of the schoolman's art; it simply ran out of the giver, a something self-made. It was like the water which falls in splashes and runs in rivulets from an over-full fountain. If Shakspeare and the Baron Verulam were two people, then the former must have composed his plays somewhat after the manner to which Miss Duhring alludes; for surely the scholastic learning sufficient for their production was to be found with but one man in all England, and that man was Francis Bacon.

In a conversation had by the writer of this article with the painter of that celebrated picture, "The Christian Martyrs," the artist spoke of his conception as the creation of a moment, begotten and born of a thought that came to him as on a summer's afternoon he sat looking out upon the sky from a stone bench in the Coliseum at Rome. "I painted it," he said, "when I got home, but I did not alter an iota of the original idea."

Let it not be said that pigment is the picture, or that words are poems. Color and language are but expressions of Idea. It is Idea that is the true thing, not Representation. Forms of speech are to a thought what the

railway is to a locomotive. Krummacker is right,—*"Bild und Zeichen sind nicht das Wesen."*

The views of Miss Duhring find a strong defender in the immortal Academician. "Matter," says Plato, "is the copy of the idea," and this truth he defends with a vigor which quickly enough leaves an opponent nothing to say. In reading over some of the reviews of "Gentlefolks," we have been led to think that a perusal of a few of the arguments of the "Republic" would have saved the writers from making expositions much more injurious to themselves than to our authoress.

In that volume of Addisonian English, "The Lorgnette" of John Timon, the author has published the notices made of his book, pro and con; they are very amusing, and have furnished, no doubt, the occasion for many hearty laughs to the writer and his friends. We cannot but think that Miss Duhring has found a like amusement from the differing opinions of her critics.

We are not able to admit, however, that our authoress impresses us as being one who writes exclusively from that inspiration by which she sets so high a store. Scholarship and the peculiar culture of the literatus are marked associates of her productions.

Knowing the writer to be a woman,—we were formerly under an impression that the name was a *nom de plume*,—we find ourselves wondering as to where the experiences come from. Few modern books show greater breadth of acquaintance with the belles-lettres than does "Philosophers and Fools." We cannot but think it a great accomplishment to be able to use German, French, and Latin as one does his mother-tongue; and this Miss Duhring seems to us to be able to do.

This brings us to what we incline to pronounce the fault of our authoress's style. It is too masculine; that is, it is too positive to correspond with the negative nature of womankind. Not but that a woman may have thoughts vivid as those of a man, and that she may as well give utterance to them; but she can have these thoughts and can give voice to them only at an expense in the way of wear and tear that makes a doctor fear for the physique. Such a fault, however, concerns its possessor rather than other people.

In concluding, we would direct attention to the particularly happy employment of the semicolon by Miss Duhring. Here indeed is an admirable illustration, if we mistake not, of what she means by the unpremeditated doing of things; and here, as well, is no expression of effort. Her writings are full of sentences made by this particular punctuation mark; it seems to drop from her pen entirely regardless of any study of measure, yet it is always found in the right place, and the phrases made by it would be commended, we think, even by the phlegmatic Blair himself.

J. E. G.

THE CAUSES AND OPERATIVE TREATMENT OF DUPUYTREN'S FINGER CONTRACTION. By Dr. OTTO W. MADELUNG, Lecturer of Surgery at the University, and Assistant Surgeon at the University Hospital, Bonn. Trübner & Co., London. G. P. Putnam's Sons, New York.

The author of this little brochure of twenty-four pages gives a very clear description of a troublesome surgical affection, first brought to the notice of the profession by Dupuytren, known as "Contraction of the Palmar Fascia."

Dr. Madelung's observations have led him to believe that contraction of the fingers in cases of *contractura palmaris* is principally due to a state of chronic inflammation of the fibrous tissue which connects the skin of the palm of the hand with the palmar fascia; which inflammatory process "leads to hyperplasia of the normal fibres, and finally to their shrinking, with consequent permanent bending of the fingers." The author, in discussing the etiology of this affection, claims, in opposition to Dupuytren's statement, and in accordance with Eulenburg's, that contraction of the palmar aponeurosis is not invariably met with among members of the working class.

In considering the treatment of "Finger Contraction," Dr. Madelung expresses a decided preference for Busch's method of operating; indeed, it is the only method described in this pamphlet. Other methods are simply referred to in order to be condemned as entirely worthless or positively injurious. The results obtained by the author in a large number of cases in which the proceeding of Busch was resorted to are highly satisfactory, and go far to prove the correctness of the author's views concerning the pathology of this disease.

Two very important improvements have been recently introduced into the operative method of Busch, as practised in the hospital at Bonn, which have materially contributed to the success of the operation. The first is the adoption of the Esmarch bloodless method, which permits the surgeon to proceed slowly and surely in the division of the contracted fibres of connective tissue overlying the palmar fascia and the flexor tendons without risk of injuring either of these structures. The second improvement, which will be considered a decided one by the disciples of Prof. Lister, is the employment of antiseptic dressings in the treatment of the wound.

The author closes his interesting paper by giving in detail an account of the only failure observed at Bonn: this failure is attributed to want of care, in part, of the patient himself, he having disturbed the antiseptic dressing by insinuating the blade of a knife beneath the bandage to scratch the parts around the wounds.

As Busch's method is not noticed in any of the English or American systematic works on surgery, Dr. Madelung's papers may be wel-

comed as a valuable contribution to the literature of "Finger Contraction." C. T. H.

AUTUMNAL CATARRH (HAY FEVER). With Illustrative Maps. By MORRIL WYMAN, M.D., Boston, 1876. New York, Hurd & Houghton.

HAY FEVER OR SUMMER CATARRH. By GEO. M. BEARD, M.D. New York, Harper & Brothers.

This disease, the subject of the monographs by Drs. Wyman and Beard respectively, is so persistent, occurs so frequently in the one individual, is so annoying and yet so little dangerous to life, and is so rebellious to treatment, that it stands pre-eminent among those affections in which the sufferer learns to be his own doctor. Consequently, the sale of the books of Drs. Wyman and Beard will chiefly be among the victims of the disease, and we strongly advise any such to purchase both, so as to enjoy at one time the theory and the practice of their complaint. There is sufficient diversity to prevent one work taking the place of the other. Neither of the books before us contains much in regard to the general natural history of the disease with which the profession is not already acquainted. Their chief practical value consists in their details in regard to geographical positions at which the sufferers may look for exemption, and in this respect the elaborate maps of Dr. Wyman's book give it a decided superiority.

Dr. Wyman apparently does not lay as much stress as he formerly did upon the distinction between the June cold and the autumnal catarrh, and Dr. Beard believes them to be identical diseases. After all, it seems to us that they are neither of them diseases, but rather idiosyncrasies. A well-known physician of this city is thrown into the most alarming illness by the emanations of a sprig of hyacinth. A relative of the writer is felled to the earth with syncope if she eats a mouthful of buttered bread or a spoonful of potatoes dressed with butter. Are we to have hyacinth-disease and butter-syncope? There are certain persons in whom the susceptibility to various emanations is so great that by them are induced asthma, respiratory catarrh, etc. In some of them it is powdered ipecac, in some it is the effluvium from the iron, in some it is the dust of the threshing-machine, in some it is pollen, in many it is the emanations from growing vegetation, and in others the horse, cat, or other domestic animal furnishes the "materies morbi." We have known an attack of autumnal catarrh caused by a watermelon, kept long after frosts had banished the usual disorder, and even by a green turf in midwinter. As a corollary from this, it seems to us a waste of time to discuss the identity of a June cold and a hay fever, and foolishness to assume because the symptoms are the same, and because cases occur from May to September, therefore these colds are one disease resting upon a common

cause. The fact that one case of hay fever is cured by going to a certain spot, another not (see p. 72, Dr. Beard's work), makes it exceedingly probable that even those cases which occur at one time are due to different irritant emanations.

STUDIES, CHIEFLY CLINICAL, IN THE NON-EMETIC USE OF IPECACUANHA. WITH A CONTRIBUTION TO THE THERAPEUTICS OF CHOLERA. By ALFRED A. WOODHULL, M.D., U.S.A.

So far as concerns its major subject, ipecacuanha, this brochure naturally divides itself into two parts, the practical and the theoretical. In the first the author expounds and illustrates the use of ipecacuanha for other purposes than to produce emesis. He does not add much to our knowledge, but he classifies it, so to speak, and elucidates the subject to the utmost extent; consequently, this portion of the book is a valuable contribution to medical literature. Of the theoretical portion of the work, the highest praise it seems to us entitled to is that it is an ingenious card structure, or a house built upon the sands. The upshot of its teachings is that the drug cures dysentery, etc., by being a stimulant to the nervous system, especially the "sympathetic;" all of which may be true, but is certainly unproven, and unprovable by the fact-data now at our command. New facts as to the physiological action of drugs—not new rhetorical studies of old facts—are what are needed now. Had Dr. Woodhull determined so simple a thing as whether emetia is or is not eliminated by the intestines, he would have shed far more light upon its mode of action than he does in the many pages of reasonings and speculation.

MEDICAL AND SURGICAL MEMOIRS, CONTAINING INVESTIGATIONS ON VARIOUS DISEASES. By JOSEPH JONES, M.D. Vol. I., 1876.

This large volume of eight hundred pages is devoted to the consideration of diseases of the nervous system,—tetanus, cerebro-spinal meningitis, dropsy, pneumonia, and mollities ossium. The author, who is one of the most learned and laborious of our Southern investigators, has here sustained his well-earned reputation. The essays are evidently the result of a thirst for knowledge which has endeavored to quench itself upon whatever came before the writer. As one travelling through a new country is attracted by a variety of objects, so a clever observer interested in the great study of medicine may collect data from the widest range of phenomena, and be consistent. The arbitrary boundaries between the several departments of the science are indifferently regarded by such a one, and, as Baron Larrey would record (possibly upon the same page) observations on gunshot wounds and the habits of field-mice, our author in his elaborate yet discursive manner discusses many things and does them all well.

The book will possibly have comparatively

few continuous readers. But, on the other hand, no one writing upon the topics therein treated can afford to neglect it. Should the remaining volumes be conceived and executed in the same spirit as the one before us, we predict for the series a high position in American literature, and for their author still more extended renown. H. A.

GLEANINGS FROM EXCHANGES.

TREATMENT OF CHRONIC ECZEMA BY GLYCEROLE OF SUBACETATE OF LEAD.—In a little pamphlet of thirty-two pages, reprinted from the *Medical Times and Gazette*, Mr. Balmanno Squire discusses the treatment of a form of eczema which he describes as including only those persistent conditions to which the term was originally limited; that is, those which are characterized by a colorless viscid sweating from the skin; but equally whether that sweating be abundant, so as to keep the surface of the skin bathed in glauine, or so as to concrete in large scabs; or whether it be merely scanty, and occur even in minute, discrete, but more or less clustered spots, so as to present either only thin, small, transparent, dry, gum-drop-like deposits, which on detachment are found to be concave on the under surface, and conceal a small drop of viscid exudation; or, as the case may be, small, raw, scattered, but more or less clustered, weeping excoriations. He includes also that condition in which numerous but tolerably minute moist cracks in the reddened surface are present.

He therefore considers these conditions in which there is, either obviously or substantially, a moist and viscid exudation from the skin, and excludes those in which there is only a mere papulation, or a mere plastic thickening of the skin, or a simple dry scurfiness of its surface; in short, he refers to a wet disorder, and not to a dry one.

After alluding to the almost universal use of zinc ointment or zinc lotion in the treatment of such cases, Mr. Squire asserts that he has found lead to be a much more soothing and, at the same time, a much more astringent application. It unquestionably allays the itching, restrains the discharge, and diminishes the hyperemia of chronic eczema far more speedily than zinc does. As a lotion, however, it fails on account of the evaporation of the water, and the failure of the remedy to reach the surface of the skin through the dry scab by which it is covered. After many trials, glycerin has been found in his hands to be superior to either oil or water as a vehicle for applying remedies in the case of chronic eczema; and the mixture which has been uniformly successful is to be prepared as follows. Take of acetate of lead, 5; litharge, 3½; glycerin, 20. Heat for half an hour in a boiling glycerin bath, constantly stirring, and filter in gas-oven or other kind of heated compartment. The result is a perfectly clear

and colorless liquid, which may be used in the strength of from one to two drachms to the ounce of pure glycerin.

Mr. Squire considers and disposes of the objection which may be advanced, that the use of such an ointment might give rise to constitutional symptoms from lead-absorption, and denies in toto the possibility of any such occurrence.

HOMŒOPATHIC TINCTURES (*The Medical Record*, August 19, 1876).—Dr. Farquharson, in *The Practitioner*, calls attention to the fact that the maximum doses of many drugs, as allowed by the British Pharmacopœia, are far too small, and urges the necessity for some action in the matter. He congratulates us, however, on the fact that the errors in our Pharmacopœia are mostly on the side of caution, and contrasts it with the looseness which prevails in homœopathic pharmacy, in which the feeble dilutions of former years have been replaced by excessively strong tinctures.

Anxious to obtain a correct idea of the strength of some of the homœopathic remedies, Dr. Farquharson tried some experiments with a few of their mother-tinctures and metallic solutions. He found by experiment that 15 drops of the mother-tincture of aconite were sufficient to kill a rabbit. This tincture about equals in strength the British liniment of aconite. The mother-tincture of belladonna is stronger than the tincture of the British Pharmacopœia, 10 \mathfrak{M} causing on himself dryness of the throat and unpleasant dreams. The homœopathic solution of arsenicum, of which the dose for an adult is one to five drops, contains one grain of arsenious acid to 102 \mathfrak{M} of water, while the corresponding solution of the British Pharmacopœia contains one grain to 120 \mathfrak{M} of solvent. A solution labelled "Mercurius cor. Poison." Dose for an adult, one to five drops," contained about one grain of the amido-bichloride of mercury to two fluid-drachms of alcohol. This is about four times the strength of the solution of perchloride of mercury as ordered in the British Pharmacopœia.

Both these vegetable mother-tinctures and the solutions, the latter of which were, it is true, labelled "Poison," were sold freely and without question over the counter of a homœopathic pharmacy. What becomes, then, of the boast of the homœopaths that no mercury or injurious metallic substance is ever prescribed by one of their practitioners? The above figures show how misplaced is the rash confidence of homœopaths in the weakness and innocuousness of their drugs. A mistake in the matter of aconite, for instance, would not be likely to occur to the same patient a second time. Indeed, in view of the careless way in which amateurs recommend and take homœopathic remedies, it does not seem at all improbable that a mother-tincture might be mistaken for one of its dilutions. In conclusion, Dr. Farquharson cheerfully admits that although we are supposed to ruin the consti-

tutions of our patients with enormous doses of deleterious substances, we must yield the palm of potency of dosage to those practitioners the very essence of whose professional existence was formerly believed to depend on the magical effect of their infinitesimal dilutions.

CHORALIZATION (*The Lancet*, August 19, 1876).—An Austrian surgeon, M. Linhart, has communicated to Baron Larrey an account of an interesting case, in which the anæsthesia and muscular relaxation necessary for the reduction of a dislocation of the shoulder were obtained by the intravenous injection of chloral. The patient had inhaled chloroform on two previous occasions, but each time the excitement under the chloroform had been very intense, and much vomiting followed. It was, therefore, decided to chloralize him. The solution of chloral employed was neutralized by a few drops of carbonate of soda. A gold needle was used, and the utmost care taken to insure freedom from extraneous particles. The injection was made into the left arm. At the end of fourteen minutes seven grammes of chloral had been absorbed, and anæsthesia was complete. There was not the least reflex movement. The reduction of the dislocation was effected with extreme facility. Absolute anæsthesia continued for half an hour; he was then awakened, and he drank, and then slept for several hours. On recovering there was no nausea or vomiting. Slight defective sensibility continued for twenty-four hours. The vein into which the chloral had been injected showed no trace of irritation or of coagulation.

PLASTIC DRESSING IN FRACTURES OF THE LOWER EXTREMITY (Pamphlet, pp. 10, Indianapolis, 1876).—Dr. David W. Yandell urges the prompt, and if possible the immediate, application of some form of plastic dressing in all fractures of the lower extremity. He says that "if you would encounter a broken leg when the injury done is at the minimum, when in dressing it you would give least pain and have it most in your power to avert inflammation and all the evils which journey in its train, you must do so on the spot where the accident has occurred, and as soon afterwards as you can get to it. Every inch that a fractured leg is moved is hurtful; every moment lost before putting it up is injurious. Swelling and pain are mere calls for rest, and the more quickly and perfectly you secure this the more rapidly and more completely will they quit the broken limb. Oftentimes the injury done to the soft parts by the ends of the bones being suddenly and violently displaced by muscular action, or by change in the position of the patient, gives rise to some of the greatest dangers which occur in fractures. Hence, the sooner you adjust the fragments, and the more securely you provide against their subsequent displacement, the better you will have treated the case. Let

neither pain nor swelling deter you from dressing the limb at once. If you see the fracture first at night, I pray you wait not till morning to put it up. Don't trust to sand-bags, or pillows, or splints, or this or that other device, and finally take your leave, saying you will call in the morning. A sight of mischief may occur between midnight and sunrise."

After narrating some cases of complicated fractures in which this form of dressing was used with great success, Dr. Yandell states that in all the cases in which he has applied it there has never been one in which he has had occasion to remove it on account of swelling. When it is put on before swelling has taken place, cure will follow; and when swelling has already occurred, it will abate, and disappear altogether.

TREATMENT OF COMPOUND DEPRESSED FRACTURE OF THE SKULL (*The Lancet*, July 8, 1876).—Mr. Sampson Gamgee reports three cases of compound depressed fracture of the skull, in each of which the scalp was divided and the bones of the head broken and driven in, without producing evidences of injury to the nervous system. In none of the cases was the trephine applied, and in all the result was perfectly successful. From a consideration of these cases, and a careful comparison of the views of British and foreign surgeons, Mr. Gamgee concludes that in compound depressed fracture of the skull *without brain-symptoms* the proper course of practice is not to trephine.

TREATMENT OF SYPHILITIC BUBOES BY THE PARENCHYMATOUS INJECTION OF IODIDE OF POTASSIUM.—Dr. Jacobowitz, of Nagy-Karoly (*The Clinic*, August 19, 1876), starts from the principle that no inflammation to which a degenerative action is attributable is occasioned by the injections, but that by this means a solvent of a non-irritating character is brought into direct contact with the glandular tissue. He avoids tincture of iodine, all alcoholic fluids, and carbolic acid, and uses instead a weak solution of iodide of potassium in the proportion of about one part to thirty of water. He gives two cases in which he obtained extraordinarily successful results. In one case he made a puncture into the most prominent part of a gland which was enlarged to the size of a goose's egg, pushing the needle in obliquely to a considerable distance. After injecting about the fourth of the syringe-ful, a resistance was felt; he then withdrew the needle for a short distance, penetrated a septum on one side, and again injected a quarter part. By repeating this process, he threw in about fifteen grains of the iodide in an ounce of water. The tumor almost immediately became harder, smaller, and less painful. After four injections performed in the course of two days, the tumor gradually dwindled to the size of a hazel-nut, and ultimately vanished altogether. The second case

was very similar. Here, however, two dark blue bodies remained, which were so hard that it seemed to be impossible to inject them. Dr. Jacobowitz, however, injected hypodermically the iodide on two occasions, and with perfect success. Ten injections were required altogether. The small quantity of the iodide required to produce the effects observed is very remarkable.

CÆSAREAN SECTION (*Detroit Review of Medicine*, September, 1876).—Dr. O. P. Barke reports a case of Cæsarean section performed upon a female dwarf æt. 17. The mother was forty inches long, and weighed sixty-five pounds; the child was twenty inches in length, and weighed six pounds. The mother died sixteen hours after the operation; the child was alive and well six months later.

THE PHYSIOLOGICAL EFFECTS OF COMPRESSED AIR (*The Lancet*, August 5, 1876).—There have been many observations of late upon the effects produced on the functions of the body by long immersion in compressed air; and the efficacy of the compressed-air bath in certain pulmonary affections is held deservedly in high repute. Most of the observations on the subject have been made by M. P. Bert, of Paris, who supplemented his previous researches by a note read at the last meeting of the Société de Biologie. He pointed out that the mechanical effects of compressed air were to cause lowering of the diaphragm and liver, and a consequent increased pulmonary vital capacity,—an effect gradual in its production, but lasting long after the subject is withdrawn from the condensed atmosphere. Other experiments have been made by M. Pravaz, of Paris, and Drosdorff, of St. Petersburg. The former finds that the heart's action is at first increased and then lessened; the pulse first becoming more rapid and then slower, but never falling below the rate at the normal atmospheric pressure. The respirations are diminished during the immersion, but on removal of the increased pressure they rise in frequency, and in direct proportion to the degree of compression of the air. There is an increase in the amount of urea excreted, but this increase diminishes the longer the sojourn in the compressed air. There is at the same time an increase in the amount of carbonic acid expired. The temperature of the body rises above the normal at first, and then falls as the immersion is prolonged. These varying effects are due, M. Pravaz thinks, to the two influences of inward atmospheric pressure and hyper-oxygenation, the former tending to diminish the circulation and the organic changes, and the other to increase them. He agrees with Waldenburg that there is a lessening of arterial tension under these conditions, but herein he differs from M. Drosdorff, who has found, first, that the inspiration of air at a low degree of compression (one-sixth atmosphere) raises the negative pressure of the thorax, and thus

lowers the blood-pressure in the aortic system; secondly, inspiration of air at a higher degree of compression induces active expansion of the lungs and diminishes the negative intra-thoracic pressure, whilst lowering the expiratory power of the thorax, and hinders the passage of the blood from the veins into the arteries; hence a diminution in the arterial pressure.

A CASE OF LITHOPÆDION (*The Clinic*, August 12, 1876).—At a recent meeting of the Wiener Medicinische Gesellschaft, Dr. Chiari showed a tumor taken from a woman, eighty-two years of age, who had lately died of an attack of pneumonia. By the side of the uterus, which was very long, a swelling, the size of a man's head, was found, and, on opening it, most of the parts of a fœtus were discovered. The woman stated that in 1827 she was for the last time in the family way. After the eighth month she felt no approaching confinement, and went on without experiencing any pain, with a large tumor in the abdomen. She never consulted any one about it, and lived on for fifty years with the unsightly swelling. Dr. Chiari, after a minute examination of the pelvic cavity, concluded that this was a case of abdominal pregnancy.

MISCELLANY.

THE EUCALYPTUS GLOBULUS.—The Italian Government, persuaded by the success of the Trappist brotherhood of *San Paolo fuori le mura di Roma* that the Eucalyptus Globulus has a beneficial influence in malarious districts, has presented to the land-holders of Italy large supplies of slips of the tree for the purpose of forming plantations where its virtues seem required. The Government also intends to grow the Eucalyptus along the boulevards of the large cities, and even along the various lines of railway throughout the kingdom. Land-holders themselves are following the initiative of the Government, and in a few years Italy expects to drive malaria effectually from her borders.—*The Druggists' Advertiser*.

DOMESTIC DOSAGE OF MEDICINES (*British Medical Journal*, February 26, and *London Practitioner*, May, 1876).—Dr. Farquharson's Drop Table.

56 drops distilled water	= 60 minims.
113 " tinct. opii	= 60 "
114 " tinct. digitalis	= 60 "
100 " liq. morph. hydrochl.	= 60 "
80 " oxymel scillæ	= 60 "
75 " syrup. papaveris	= 60 "
45 " glycerine	= 60 "
114 " spts. ætheris nitrosi	= 60 "
112 " tinct. camph. comp.	= 60 "
55 " acid. sulph. dil.	= 60 "
55 " olei ricini	= 60 "
110 " spts. terebinth.	= 60 "
100 " ol. anisi	= 60 "

NOTES AND QUERIES.

ENGLISH ANTI-VIVISECTORS SEEN THROUGH PARISIAN SPECTACLES.

MR. EDITOR.—I have translated from the August No. of the *Archives Générales* an article which I send you, that your readers may have the opportunity of knowing how absurd and ridiculous the anti-vivisectors appear from the Parisian scientific point of view. In my humble opinion we Americans have allowed ourselves to be too much swayed by the grannies of both sexes, and the sentimentalists whom it would be difficult to class with either sex.—E.

"The English have always been famous for their singular mixture of common sense and eccentricity of the most exacting sort, which, indeed, are the staple national qualities. Just now sentimentality is rampant. A certain number of sympathetic ladies and gentlemen, belonging to the Society for the Prevention of Cruelty to Animals, have raised a crusade against vivisection. Our readers will remember the succulent trial, after the last medical congress, in which some of our countrymen figured *in absentia*. And now a bill against experimentation is before Parliament, and is very likely to be adopted. No less than two thousand of the most notable physicians in the kingdom have been obliged to present to Mr. Cross, the Home Secretary, their urgent protest against this action! Whereupon Mr. Cross informs them that he is much more concerned for his position as Secretary than for the interests of science, and that if they will take his advice they had better be satisfied with the bill, lest they go farther and fare worse.

"Who would believe that in a country where a few weeks ago the glorious memory of Harvey was celebrated, and in the year of grace 1876, it should become necessary to oppose, and that without any assurance of success, a law which contains such provisions as these: 'That for every course of experiments likely to occasion pain, all duly qualified physicians and none other must first obtain a ministerial license; that they must conform to all the restrictions and formalities required by such certificates; that they must furnish the Secretary such records of their experiments as he may require of them; that the experiments shall be made only in places specially licensed for the purpose; and that in regard to experiments on dogs, cats, asses, mules, and horses, the license to perform them must be granted by the Secretary of State?'

"Everybody knows the legend that Galvani discovered the physiological action of electricity in a frog prepared for his wife's meal. Imagine Galvani writing thus to the minister of Bologna: 'Your Excellency,—I have the honor to solicit from you the privilege of discovering the application of electricity to the muscles of frogs, and to immolate such a number of these creatures as your Excellency will permit. I promise to discover nothing except in such a street, at such a number thereof, and in presence of your Excellency's agents.'

"But these are not the most original provisions of the bill. To experiment on a rabbit or guinea-pig the Home Secretary's authority avails, but no less a personage than the Secretary of State can authorize the sacrifice of a cat. So the ministers are classified: the molluscs and the gallinacæ are placed under the protection of the one, and selected mammals confided to the other. And thus, by a most unlooked-for conjuncture, a ministerial zoology is established.

"Fortunately, such restrictions are as illusory as they are ridiculous. But we cannot help thinking it curious that a nation so little prone as the English to Pythagorean food that they slaughter more animals to eat than any people in the world, should grow lachrymose over the thought of giving pain to a tadpole for the sake of sparing pain to man."

PLAN FOR ORGANIZATION OF THE AMERICAN MEDICAL ASSOCIATION.

THE general meetings of the Association shall be restricted to the morning sessions; and the afternoon sessions, commencing at three o'clock, shall be devoted to the hearing of reports and papers, and their consideration, in the following Sections:

1. Practical Medicine, Materia Medica, and Physiology.
2. Obstetrics and Diseases of Women and Children.
3. Surgery and Anatomy.
4. Medical Jurisprudence, Chemistry, and Psychology.
5. State Medicine and Public Hygiene.

The Sections shall be organized by selecting from the permanent membership such members as may have acquired distinction in the branches of medical science assigned to the respective Sections, such selection to be made from the roster of permanent membership next preceding the adoption of this amendment, by a committee consisting of the three chairmen and so many of the ex-chairmen of the respective

Sections for the three years next preceding as may be present at the time of the adoption of this amendment; provided, however, that no one shall be thus made a member of more than one Section.

Only permanent members shall be eligible to membership of the Sections; and annually, as hereinafter provided, each Section may elect such as may be qualified by three years' consecutive membership, and who may have acquired distinction in the branches assigned to the Section. Forfeiture of permanent membership shall forfeit membership of Sections, but such forfeiture shall not prevent a re-election.

The officers of the Section shall consist of a chairman, secretary, a committee on business, a committee on membership, and a committee on essays. The chairman and secretary shall be elected by a majority of the ballots cast by the members of the Section, and shall hold their offices until the close of the business of the annual meeting next succeeding their election. The committees shall be appointed by the Chairman, and hold office for one year or until their successors are appointed.

The Chairman shall preside at all the sessions of the Section, perform all the duties ordinarily pertaining to the duties of a presiding officer; shall exercise general supervision over the business of the Section, see that the duties of the officers and committees are properly discharged, and shall prepare and read, in general sessions of the Association, a paper on the advances and discoveries of the past year in the branches included in the Section: the reading of such paper shall not occupy more than forty minutes.

It shall be the duty of the Secretary to keep a correct record of the proceedings of the Section and report the same to the Permanent Secretary; to revise and correct the reports of the stenographer, and deliver the same to the Committee on Essays; and to perform such other duties as may properly appertain to the office of Secretary.

The Committee on Business of each Section shall consist of three members, to be selected, when practicable, from the members residing in or near the city in which the meeting of the Association is to be held.

It shall be the duty of this Committee to prepare business for the Section, and, with that view, to select two or more subjects appropriate to the Section, and also to appoint from the members of the Section as many members, to each of whom a subject shall be assigned for report thereon, which report shall be prepared and submitted to the Section at the meeting next ensuing. Voluntary papers may, with the approbation of the Committee, be submitted by any member or of delegate to the Association. All papers and reports must be sent to the Committee at least one month before the meeting, and it shall be the duty of the Committee, after careful examination, to fix the time and order of presentation, and to prepare a memorandum of the titles, together with the main points set forth in the argument, which shall be printed and distributed to the members of the Sections by the Assistant Secretary.

The Committee on Membership of each Section shall consist of five members. It shall be the duty of this Committee annually to examine the roster of permanent membership, and recommend for election to membership of the respective Sections such as may be eligible and deemed qualified. It shall also examine the roster of membership of the Section, make all necessary corrections of names and addresses, erase from the list the names of all who may have forfeited their membership, and designate the deceased members.

The Committee on Essays shall be composed of three members. To this Committee shall be referred for examination all papers read before the Section, and all debates. The Committee will be allowed thirty days, at the expiration of which time it shall forward the papers to the Committee on Publication, with such recommendation as may be deemed proper; but no paper or discussion, either in whole or in part, shall be published in the Transactions without the recommendation in writing of said Committee on Essays.

The Committee of Arrangements shall provide for each Section a competent stenographer, who shall furnish the Secretary with a full verbatim report of the debates of the Section.

No member shall address the Section more than once upon the same subject, nor speak longer than fifteen minutes without unanimous consent.

The Permanent Secretary shall prepare annually a list of the members of each Section, which shall be published in the Transactions, and shall furnish each delegate with a printed copy of the plan of organization and by-laws, together with rosters of the permanent and Section membership.

THE office of the editor, Dr. H. C. Wood, has been removed to 163 Arch Street, where communications should be addressed. He may be seen there personally until 10 A.M.

MR. EDITOR.—On March 11, 1875, Mrs. Hunter, a patient of mine, gave birth to a male child, on whose upper lip, to the right of the median line, was a mark extending from the alæ of the nose to the mouth, resembling the cicatrix which would result from an operation for hare-lip: so that the defect in the lip caused by an arrest of development was remedied by nature herself in utero. It still presents the same appearance at the present time.

The mother could not account for it by any maternal impression.

Yours, etc.,

October 6, 1876. WILLIAM T. TAYLOR, M.D.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM SEPTEMBER 24, 1876, TO OCTOBER 7, 1876, INCLUSIVE.

BYRNE, C. C., SURGEON.—Granted leave of absence for one month. S. O. 120, Department of Dakota, September 25, 1876.

FRANTZ, J. H., SURGEON.—Granted leave of absence for two months, on Surgeon's certificate of disability. S. O. 195, Military Division of the Atlantic, September 28, 1876.

HARTSUFF, A., SURGEON.—Granted leave of absence for one month, with permission to apply for an extension of one month. S. O. 135, Department of the Platte, September 30, 1876.

GREENLEAF, C. R., SURGEON.—Leave of absence extended one month. S. O. 194, Military Division of the Atlantic, September 27, 1876.

WATERS, W. E., ASSISTANT-SURGEON.—Granted leave of absence for four months. S. O. 201, A. G. O., September 27, 1876.

WILLIAMS, J. W., ASSISTANT-SURGEON.—Relieved from duty in the Department of Dakota, and to report in person to the Surgeon-General at Washington, D. C. S. O. 204, A. G. O., September 30, 1876.

BROWN, J. M., ASSISTANT-SURGEON.—Assigned to duty at Fort Garland, C. T. S. O. 202, Department of the Missouri, September 27, 1876.

GARDNER, W. H., ASSISTANT-SURGEON.—Granted leave of absence for four months, with permission to apply for an extension of two months. S. O. 204, c. s., A. G. O.

BUCHANAN, W. F., ASSISTANT-SURGEON.—Granted leave of absence for four months. S. O. 206, A. G. O., October 3, 1876.

KINSMAN, J. H., ASSISTANT-SURGEON.—Assigned to duty at Fort Sully, D. T. S. O. 121, Department of Dakota, September 27, 1876.

TREMAINE, W. S., ASSISTANT-SURGEON.—Granted leave of absence for thirty days, upon completion of his examination for promotion. S. O. 202, c. s., Department of the Missouri.

MOFFATT, P., ASSISTANT-SURGEON.—Granted leave of absence for four months, with permission to apply for an extension of two months. S. O. 204, c. s., A. G. O.

BEDAL, S. S., ASSISTANT-SURGEON.—Assigned to duty at Fort Duncan, Texas. S. O. 174, Department of Texas, September 30, 1876.

TURRILL, H. S., ASSISTANT-SURGEON.—Assigned to duty at Fort Davis, Texas. S. O. 172, c. s., Department of Texas.

COMEGYS, E. T., ASSISTANT-SURGEON.—Granted leave of absence for one month, with permission to apply for an extension of one month, and, on expiration of leave, assigned to duty at San Felipe, Texas. S. O. 174, c. s., Department of Texas.

CUNNINGHAM, T. A., ASSISTANT-SURGEON.—Assigned to duty at Fort Stevenson, D. T. S. O. 121, c. s., Department of Dakota.

JACKSON, D., ASSISTANT-SURGEON.—Died at Woodville, Ontario, Canada, on September 22, 1876.